# SUCCESS STORY

## FCC FURNITURE INC.

**Oregon Manufacturing Extension Partnership**

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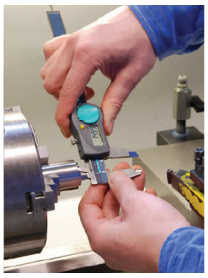
*Who would have thought that shop floor people would be doing industrial engineering type work, calculating takt-times (pace of work) and determining equipment requirements? We are developing business thinkers at every level of this organization.*
*" Preston O'Hara, General Manager*




### CUTTING HIDDEN WASTE

**ABOUT.** FCC Commercial Furniture is located in Roseburg, Oregon. They are a privately held American designer and manufacturer of commercial furniture. With sales offices in every region of the United States, FCC Commercial Furniture services clients from coast to coast. Capabilities include wood, metal, upholster, plastic and composite processes. Owners Gary and Scott Crowe have committed time, financial support and other key resources to enfranchise their 100-person team to find ways of minimizing waste while maximizing value as perceived by the customer.

**THE CHALLENGE.** Due to the high mix, low volume mix in customer orders, and despite recent positive growth, the team has experienced significant issues with throughput, including bottleneck areas both upstream and downstream. They found that many employees were waiting on work, while others were overworked, meaning that production was uneven. Their WIP inventory was significant and throughput was not consistent. Because the organization has been set up in functional departments, there has been unacceptable levels of non-value added activities (e.g.: batching of products and searching for materials). A second event in the wood laminating department uncovered the fact that 12 people were spending a combined 24 hours per day searching and moving materials, walking miles per day to communicate with other departments and waiting unnecessarily for information or product to work on.

**MEP'S ROLE.** The 'before' condition in final assembly was documented and studied using a technique called Value Stream Mapping. This process identified the value added activities and separates them from any non-value added activity such as moving, stacking, counting etc… The team identified a number of areas of improvement opportunity and began reducing the amount of WIP inventory between each process. In one experiment the team compared the through-put time it normally required to produce a 'store' or restaurant (measured in days). By practicing what the team called "Pick it up - Finish it", they were able to produce one entire store worth of material in 55 minutes. This required balancing the line using standard work. Prior to the event, some people were over-worked and others were under-utilized. This was a hidden form of waste; as was the stacking and unstacking of material that would degrade or be damaged during weeks' of delays as people started and stopped working on dozens of projects; trying to keep busy. Now no one starts a job unless it can be finished. And everyone works to balance the flow

## RESULTS

**$124,000** in cost savings

A **16%** productivity improvement has provided an additional $2.4 Million (sales) opportunity

Reduced final assembly through-put time (lead-time) by more than **50%**

## NEXT STEPS

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so material does not stack up. This requires cross-training and a willingness on the part of the entire team to move up or down stream; toward the bottleneck process to lend a hand (flushing out a choke point) when needed. A second event in the wood department led the team to establish a 'water-strider' (a person responsible to ensure each team member was provided everything necessary to produce the job they are working on, without having to leave their work station). A blue flashing light notifies the water-strider of a need long before the assembly operator runs out of material or information necessary for them to successfully complete their tasks. This has saved a combined 16 hours of labor per day.